PROPOSED PLAN FOR THE POWER BURST FACILITY CORROSIVE WASTE SUMP AND EVAPORATION POND

PUBLIC MEETING
IDAHO FALLS, IDAHO
April 8, 1992

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MR. SMITH: I would like to welcome everyone out there to our discussion on the proposed plan for the Interim Action at the Power Burst Facility is dealing with the Corrosive Waste Sump, related piping, the discharge pipe and the Evaporation Pond.

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My name is Reuel Smith and I'm the INEL community relation plan coordinator. have been asked to moderate this meeting tonight. And part of my duties as moderator will be to work us through the agenda and make sure that everyone who wishes to participate has an opportunity. And by way of just general information, if anyone has a concern or especially a compliment about any of the materials that you have been receiving in the . mail, the INEL Reporter, the proposed plans, comments about the information repository, sections of the public library or administrative record documents, if you'll see myself specifically about the INEL Reporter.

I would like to introduce Eric
Simpson at the back table, who is the editor of
the Reporter. If you have any comments that you
would like to make to him, feel free to visit

with any of us about any of these issues at the break or at the end of the meeting.

We see a lot of familiar faces tonight, and we're pleased that on a night like tonight that you could take time out of your schedule to come and participate in this meeting with us.

attention to some of the previous projects that you have attended public meetings on where we've had public comment in the past. In this month's issue, or I should say last month's, in the March issue of the INEL Reporter, of which we have copies in the back, there is a section on page 7 which deals with an update to bring you up to date on the status of the nine projects. that have already been out for public review and comment. So I wanted to bring that to your attention.

As you signed in tonight, if you indicated that you would like to receive the INEL Reporter, you will be getting those issues.

Tonight will be the first meeting on the Power Burst Facility. There will be another meeting to discuss the proposed plan in Burley

tomorrow evening.

We've received comments related to the number and frequency of meetings that we're holding on proposed plans, and we want to just let you know tonight that we have heard two sides of an issue to have more meetings or to have less meetings and focus on cleanup efforts, so we're in the process of preparing four interactive workshops in May where the public would be invited to come and help give ideas and suggestions on how to update the INEL Community Relations Plan to help address some of these issues and others that have been raised.

Now, for a little background on tonight's meeting, this project has been identified as an Interim Action in the Federal Facility Agreement and Consent Order. Now, for those of you who may be new tonight, the purpose of an Interim Action is to reduce, control or eliminate problems that are associated with contamination at these sites. And much more information will be given to you in the presentation that will be starting here momentarily.

This agreement was signed by the

Department of Energy, Environmental Protection Agency, and the State of Idaho in the month of December. Since that time a number of cleanup projects have been initiated. We also have copies of this plan at the back table if you'd like to pick one of those up.

Now, the comment period for this project began on March 25th, and it is scheduled to end on April 24th, and due to a mailing glitch with our computer disk and our mailing label, only three-fourths of the proposed plans were sent out to the public on March 19th.

About nine days later the additional one-fourth of our mailing list went out. So we did have a problem, and most of the zip codes were in the Boise and Moscow areas.

So I apologize for that problem that was created. Because of that, we've received a letter asking for a 30 day extension to the comment period. And the agencies have discussed this and have agreed that the comment period would be extended. Formal notice of the extension will be forthcoming in the local papers.

So back to tonight's meeting. Once

the agencies have put together a proposed plan on a project, it's time to take it out and involve the public in evaluating the alternatives that are discussed in the proposed plan. So the input that is received tonight at this meeting and also the written comments that are sent in regarding the subject will be evaluated by these agencies before they decide on a remedy.

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Now, I would like to introduce some of the folks up here at the front table. On my far right is Tom Stoops, who is the Waste Area Group coordinator for the State of Idaho on this specific project, and Tom works in the Idaho Falls offices here on 17th Street.

Next to Tom is Donna Nicklaus, who is the Department of Energy Waste Area Group manager. And next to Donna is Randy Bargelt, who is the EG&G project manager for the Power Burst Facility Project.

Now, next to Randy we have set up tonight under a special arrangement, we're connected to Seattle to speak with Region 10 of the Environmental Protection Agency. And the individual there, Howard Blood, is the project

coordinator for the Environmental Protection

Agency, and there may be others at EPA that have

agency folks that will be coming in and out, but

Howard will be our primary contact for the

Environmental Protection Agency tonight. Let me

do a test and ask Howard if he can hear us and

if you're there, Howard.

MR. BLOOD: Yes, I can hear you fine, thanks. Glad to be here.

MR. SMITH: That's great. Let me make a comment. If during the meeting tonight, anyone has trouble hearing from the speaker phone and so forth, just raise your hand and of we'll give a key over here to the individual over at the control panel and he can make some adjustments. But we're hopeful that this will work out using the speaker phone.

Another individual I would like to introduce tonight is Mike Coe. Mike, would you stand, please. Mike is with the INEL Public Affairs Office. As you know, the topic of tonight's discussion is on the Power Burst Facility, but you may have other issues and concerns about the INEL or the Department of Energy. If you see Mike at the break or

following the meeting, he will be happy to help you with the answers to those questions.

thanks to Lane Allgood who is sitting over here at the control panel. Lane is the director of the Pocatello and Twin Falls INEL offices. In addition to his other duties, he consents, it's kind of like this, we have to twist his arm a little, but he consents to help us out and has been a great support over many months in doing the sound system for us.

From this point on I would like to turn the time over to the agencies to give some opening comments. Donna, I will turn the time over to you.

MS. NICKLAUS: Thank you, Reuel. As Reuel said, my name is Donna Nicklaus. I'm the DOE Idaho Waste Area Group 5 Manager. Waste Area Group 5, just to give you a little background, under the Federal Facilities Agreement is one of ten Waste Area Groups at the INEL. The Interim Action that we will be talking to you about tonight is one of 13 operable units, which are just smaller manageable units within these Waste Area Groups.

And Randy Bargelt will be giving you a presentation on the proposed action in this area.

An Interim Action is undertaken, as Reuel said, to remove immediate unacceptable risks and also to expedite the overall site cleanup in the area. By taking an Interim Action you can move and get an operable unit cleaned up more quickly than following clear through the additional CERCLA process.

With that, if you have any questions that you would like to direct to me, I would be glad to discuss those with you. I'm glad everybody turned out tonight, and we look forward to getting your comments on the alternatives and options that we proposed in the proposed plan.

Tom, would you like to make some comments for the State?

MR. STOOPS: I'm Tom Stoops. I'm
WAG manager for the State of Idaho Division of
Environmental Quality. I would like to thank
everybody first for being here this evening.
It's important for us to get your comments. All
the three agencies have come to a consensus and

worked diligently on coming out with this proposed plan.

I want to stress that it is a proposed plan and final remedial selections are not made until we receive both verbal and written comments and have had a chance to review them. Without going over too much of the same ground, Randy.

MR. SMITH: We want to ask Howard

Blood if he has any additional comments he would

like to make at this time from EPA.

MR. BLOOD: No, I think you've done an excellent job in laying out the ground rules where we're headed with this process. I would like to just reiterate that the public comments are a vital part of the process and we're here to hear what anybody that has any response to this proposed plan has to say about the plan or any of the variations on it. Thanks.

MR. SMITH: Thank you, Howard and panel. Before we go on, I would like to just have you take a look at the agenda that you received at the door tonight and just walk through that. The next thing that will occur is that we'll have Randy Bargelt give a brief

presentation of the proposed plan. And following that presentation, we will have a period of clarification. If there are some points that need to be clarified in the presentation, we'll do that, then open up to a general question and answer period.

During that period you'll notice
that there are cards placed on your seats as you
came in the room tonight. If during the
presentations a question comes to mind, if you
would jot down the idea or the question that you
have, we'll collect those cards afterwards, and
we'll be able to respond to your question a
little better. We found that by having it
written on a card, we don't lose the details of
your question.

If I had to restate the question, I might misspeak, and we don't want to do that, so I would like to bring that to your attention.

We also have microphones available after the presentation that you're welcome to use.

After the question and answer period on this proposed plan, there will be an opportunity for those who have prepared statements to make the comments for the record.

This comment period provides an opportunity for the panel to hear your thoughts on the proposed plan and remediate the alternatives and the options that were presented in the proposed plan.

One of the purposes of the meeting tonight is to ask you and invite you to express your opinion on this proposed plan. As you noted, not only are there two alternatives, but there are options under one of the alternatives, which we would like to receive comment on.

If you choose not to comment tonight, I would like to remind you about written comments that we ask that you fill out. At the back of the room you'll find a form on colored paper entitled Power Burst Facility Interim Action, and on this form there is an address where you can send your comments to, but we would welcome those at tonight's meeting. There is a black tray on the back table. If you deposit those we'll collect those tonight or you're welcome to mail those in at your convenience after you've had time to ponder what you heard here tonight.

Now, what happens to your comments

after you have made them? After the comment period tonight and after this comment period ends on May 24th, the Department of Energy will summarize the comments that are made during the comment portion of this meeting tonight and the one in Burley, and we'll put those together with the written comments that have been received.

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The issues that are identified will be responded to in a document called a Responsiveness Summary. Those of you who have signed in tonight, and given us your name and address and those who submit written comments later on or make comments tonight, will receive a copy of this Responsiveness Summary. Along with a copy of tonight's transcript will be placed in the Administrative Record portion of the INEL information repositories which are located in public libraries and we have the address in one of the INEL Reporters here in the back of the room.

As you've noticed, we do have a court reporter here tonight with us. And this transcript will be placed in the Administrative Record along with the Record of Decision and the Responsiveness Summary for this project.

In my haste to get under way, I failed to recognize several other individuals in the audience and I might just recognize Dixie Richardson who is here tonight with Senator Steve Symms office and Mel Richardson who is one of our other legislators. We're pleased that you can be here tonight.

With that, I would like to just turn the time over to Randy, and again just ask that, if possible, you hold your questions of clarification until after the presentation when we have had a chance to see the flow of ideas that will come through the slides. But if you feel like it's important to clarify a point, go ahead and we'll take that question during the presentation. Otherwise, again, please make comments on your note cards and we'll collect those at the end of the presentation. So, Randy, go ahead and turn the time over to you.

MR. BARGELT: My name is Randy
Bargelt. I'm the Waste Area Group manager for
WAG 5 for EG&G. I'm here to present the
agencies' proposed plan for the Power Burst
Facility, Evaporation Pond and Corrosive Waste
Sump. These two sites comprise the operable

Unit 5-13.

As most of you know, the Power Burst Facility is located on the INEL, which is approximately 45 miles west of Idaho Falls, and the Power Burst Facility is located approximately four miles north of Highway 20.

The Power Burst Facility reactor was operated from 1972 to 1985. And it was commissioned to perform testing on pressurized water reactor fuel rods. This is a photograph of the PBF Reactor Facility, and right here we have the cooling tower and the reactor building and the operable unit, which is comprised of the Corrosive Waste Sump and the lined Evaporation Pond and discharge pipe which connects the waste sump and the pond.

The secondary coolant water from the cooling tower was treated and put into this pond for evaporation. This is a diagram which simplifies the actual plumbing of the treatment facility for the secondary cooling water. The cooling water here, the secondary, was treated with hexavalent chromium as an algal and rust inhibitor. And two to four times a year this system was drained down and put out into the

Evaporation Pond for evaporation.

The hexavalent chromium was treated within the reactor building with sulfur dioxide to reduce it to the less toxic trivalent chromium. That was then discharged into the Corrosive Waste Sump where that solution was neutralized to a pH of about 6.5 to 7.0. The water was then discharged to the Evaporation Pond for evaporation via the discharge pipe.

This is the Corrosive Waste Sump.

It is a concrete structure about 11 by 11 feet square and 14 feet in height. There is only about three feet sticking above the ground here in this picture.

The solution from the cooling tower, which came in from this side was neutralized inside the sump and then pumped out to the Evaporation Pond, which this is one side of the berm for the Evaporation Pond.

was surrounded by a six foot cyclone fence.

Also within our investigations there is
approximately 1300 gallons of water within the

Sump that we will remove, we propose to remove
and treat and dispose of properly.

This is a photo of the Evaporation

Pond. Again, you'll see the cooling towers, the reactor building, back off there in the corner just over the berm is the Corrosive Waste Sump.

You'll see the discharge pipe right there where the water was fed from the Corrosive Waste Sump into the pond.

The pond measures about 140 feet by
140 feet inside diameter. It's filled with
about six inches of sediment on an average
across the bottom of the pond. Those sediments
were put in there intentionally to keep the
liner of the pond from getting blown around and
also to protect the bottom of the liner from the
ultraviolet rays of sun.

The liner itself is composed

30 mils in thickness and it's made out of

Hypalon, which is similar to the materials that

rubber rafts are made out of.

The contaminants that we're dealing with within this are cesium-137 and the chromium that we mentioned before.

We might also point out there is a couple of pieces of sagebrush or wind blown tumbleweeds that have been blown into the pond.

They are not actually going through the liner.

as I mentioned, chromium and cesium, and during our sampling activities we noticed that there was an association between high concentrations of chromium and high concentrations of cesium and they occurred together within the pond.

We put together this graphic to show that generally you'll see that the higher concentrations of cesium and chromium do occur together. I say "generally," it doesn't always happen, but we've proposed to use field screening in one of the alternatives for Hot Spot Removal where we would use portable radiation detectors to detect cesium and guide our removal action in which we would also pick up the higher concentrations of chromium.

The exposure pathways that we have identified are inhalation of chromium by the workers through dust and air and things like that and also direct exposure and ionization, ionizing radiation from cesium-137.

Again, this is an Interim Action and something that we feel that we should do because of the exposure to the workers on the site.

I think we said this a couple times this evening that the purpose of the Interim Action is to remove, eliminate or reduce exposure to an immediate risk and also to perform an early action to expedite our overall site cleanup on the INEL.

We have two alternatives that we are proposing. Alternative 1 is No Action, and Alternative 2 is Hot Spot Removal, which is our preferred alternative. Hot Spot is a relative term because all the wastes that we are dealing with are low level in nature and Hot Spot is a relative term to the sediments in the pond so we're in the highest concentration in the pond to reduce the risk and move the minimum amount of sediments and have to treat and dispose of the minimum amount of waste.

Under the Hot Spot Removal alternative, we have two treatment disposal options. One is to treat and dispose of the sediments at the Test Reactor and Warm Waste Pond, and the other is for treatment and disposal at the Radioactive Waste Management Complex.

Alternative No. 1, No Action, the

contaminants remain in place. We don't get a risk reduction or exposure reduction by not doing anything. We didn't consider this alternative much father than this, because it didn't meet any of the threshold criteria.

Alternative No. 2, Hot Spot Removal, that's to remove the concentrated contaminants through field screening techniques. What we would use is a portable radiation detector to survey the entire surface of the pond and guide our removal action by marking areas that we would notice the highest concentrations of cesium, in which the chromium is associated if you remember the graph I showed you earlier.

What this will do is allow us to minimize the amount of waste using the field screening that we would have to remove. We figure we may have to remove 100 cubic yards maximum out of the pond out of the total of 360 cubic yards of sediment that exist in there right now. This will reduce the risk and exposure to the workers on the site.

And when we're finished with the removal action, we will sample the remaining sediments in the pond to verify that we have met

the goals of the Interim Action.

This is a picture or diagram of the Evaporation Pond, and it shows a summation of some of the sampling activities that we've done today. The colors are a little interesting, but these dots right here are sample locations. And the entire bottom here is the outline of sediments that you saw in the photograph. This entire area here is covered with approximately six inches of sediment.

So these are where we've been taking samples. The shaded areas in burgundy, I guess you'd call it, are areas that we know now that we will probably remove based on our sampling.

The grid that you see is our sample location grid, and the area here, just to give you an idea of the scale, is approximately 7.2 cubic yards of sediment contained in each one of these squares. Also the liner is depicted by this, so all the sediment is laying on top of the liner.

Under this the alternative Option A for treatment and disposal is to remove the sediments up to 100 cubic yards, transport them to the Test Reactor Area and treat them at the

facility proposed for the Warm waste Pond

Sediment Interim Action. And a couple of
reasons that we came up with this was the waste
forms are alike. The Test Reactor Warm Waste

Pond has sediments that are contaminated with
cesium and chromium amongst other things, which
are the same contaminants and the same medium
that we have. So to utilize the technology that
would be existing would be a good efficient use
of resources.

When we were finished treating our sediments at the facility we would dispose of the treated sediments in the Warm Waste Pond and cap it under the Interim Action.

One other point to bring up is that the volume of sediments that they are actually treating at TRA are approximately 21,000 cubic yards. We're proposing a maximum to send to that facility if that alternative is chosen, to send approximately 100 yards maximum, which is about a half of a percent and wouldn't appreciatively add to the volume of what will go into the Warm Waste Pond.

To summarize that option we would remove the hot spots up to a maximum of 100

cubic yards from the Evaporation Pond at PBF, transport it to the Test Reactor Area, treat the sediments at the treatment facility proposed for that Interim Action and dispose of the treated sediments within the Warm Waste Pond and at that point it would be capped.

at the Radioactive Waste Complex. What we propose there is to take the sediments that we removed from the pond at the Power Burst Facility, mix those sediments with cement, take that slurry and inject that into existing low level waste, certified boxes at RWMC, which we would make efficient use of the space at RWMC. And this slide will show how we would utilize the empty spaces the boxes would go in now.

This right here is a storage tank
that has been cut up and is going to be disposed
of at the Radioactive Waste Management Complex
and it has been put into the box here, which is
a disposal box. Then there is also some
associated piping that has been put in there
also.

If you notice these dark areas, those are all void spaces. The box isn't being

used as 100 percent efficient as you could. By inserting grout into these void spaces, it would end up using most of the empty space within each box, which makes an efficient use of it, and also when the grout hardens you increase the strength of the boxes when they are stacked and placed in the Radioactive Waste Management Complex.

You'll notice here, this is not a slide of grout being injected into the box you saw on the previous slide. This is another box. But you'll still see a regular piece of metal and things and you can tell that this is really using up the space in that box. So actually what we would be doing with our sediments in grouting is almost getting a beneficial use out of them in strengthening the boxes and making efficient use of that space, and then we would dispose of those at the Radioactive Waste Management Complex.

That pretty much concludes the presentation for the proposed plan. And we have a couple of things to let you know where we're going in the future with this project. And you'll notice, as Reuel said, this date has now

been extended to May 24th when we end the public comment period. During the summer we will address the public comment in the Responsiveness Summary. In the fall we will issue a Record of Decision. In the winter we will prepare a remedial design. In the spring of 1992 we will perform the removal action.

And we appreciate your coming, and thank you very much.

MR. SMITH: Before we let Randy off the hook, are there any points of clarification that anyone would like to make about a particular slide that you saw or did anything come up in the presentation that you'd like to get an answer to before we go into a general question/answer session?

AUDIENCE MEMBER: Randy, could we go back to the slide where the survey was made of the pond itself? Was a radiation survey made of the pond?

MR. BARGELT: Yes, there was.

AUDIENCE MEMBER: That should have given you 100 percent sampling if there is a correlation.

MR. BARGELT: These samples, each

one of these here were a composite sample in which there were five samples taken from each one of these grids. So we didn't do a radiation survey across the entire pond.

AUDIENCE MEMBER: With this correlation you have with the chromium, that would have given you the total picture?

MR. BARGELT: That's correct. We took a look at the data after we had done the sampling, then later on in the process of putting together the proposed plan and saying, "We looked at the data, made the correlation and came up with where we are today." And they have not gone back in and done the sampling, which we would do now if we do the Hot Spot Removal. So it would be more efficient to do it at the time that we actually do the removal instead of go back in and resample after we made this observation.

AUDIENCE MEMBER: John Byron. Did you take an average radiation level or what radiation levels are we talking about at the pond edge or anyplace on the pond? You mention samples and average of samples, which doesn't mean a thing to me.

1	MR. BARGELT: The average across the
2	entire pond based on the sampling you see here
3	in the red dots is about 20 picocuries per gram,
4	and the highest we came across was about 345
5	picocuries per gram.
6	AUDIENCE MEMBER: That is
7	concentration, that's not radiation levels.
8	MR. SMITH: Do you have another
9	question, Mr. Byron?
10	AUDIENCE MEMBER: I'm interested in
11	radiation levels, not concentration of activity
12	in the ground material. What is the radiation
13	level, millirem per hour, what?
14	MR. BARGELT: We haven't calculated
15	that as of yet. We'd have to find out.
16	AUDIENCE MEMBER: You haven't had an
17	HP run around the pond to find out what you're
18	going to be running into. To sample that you
19	should have an HP check to start with. What are
20	your radiation levels that we're dealing with?
21	MR. BARGELT: I can't give you those
22	numbers off the top of my head. I'll have to
23	get back to you on that.
24	Can you help me out on that one,
25	Donna?

MS. NICKLAUS: I don't know the numbers off the top of my head. If we have the numbers, we will get back to you with those.

Okay?

MR. SMITH: Any other points of clarification? If not, then, let's go ahead and those of you that have written questions on the cards, if you would like to hold those up or pass them to the end of the aisle, Eric and Lee Toutt will collect those and bring them to the front so the panel can have access to those.

Again, while those cards are being collected, we would like to invite those of you who would like to step up to the microphone, please do so and ask your questions of the panel. We have the microphones for a couple of purposes, but to help the court reporter capture all of the comments and all the details of the comments.

We'll take the comments from the note cards first, and essentially what we'll do, we'll hand the cards over to Donna Nicklaus from the Department of Energy. For those questions that apply to the Environmental Protection Agency, Donna will read those into the speaker

phone so Howard will have the information and he'll know what the question is.

So if you have any specific question for EPA or the State of Idaho or the Department of Energy, feel free to write it down or come to the microphone.

So with that, Donna, would you like to read one of the cards?

MS. NICKLAUS: The first question is, "Why are we so concerned with 270 square meters out of 2,315 square kilometers?

Something this small should have been turned over to a couple of chemists to" -- I'm not sure what this word is, I will substitute remediate or cleanup for it, if that's incorrect, please let me know, "and dispose of?"

The reason we are removing this area is because it poses a risk to site workers due to the presence of the chromium in the pond and also of potential or any future use of the area. In terms of why this wasn't turned over to a chemist, this operable unit was spelled out in the Federal Facilities Agreement by the agencies and was thought to be best handled through the Interim Action process.

MR. SMITH: Let me mention also, if those who submit written cards, if you would like to follow up with a question or one of these questions raises another question from the person that's submitted it, please feel to follow up.

Also the panel, if there is a word that is unclear or if they are not sure what is being asked, they may interrupt the question and if that's unclear, please submit another card or come to the microphone and tell them they missed the point, if that's the case.

MR. STOOPS: I have a question here that states, "May I have an example of a comment made by the state on the proposed plan?"

When we went through creation of the proposed plan, it went through six different revisions. As you might be aware, that's quite a number of comments. The specific comments that were made dealt with risk. How were the analyses performed? What are we doing to substantiate this? It's an informal, but it's a very -- there is a high density of questions that are asked over a period of about six or eight weeks. We went through six revisions.

And without a little more specificity on what kind of questions that you're wondering that we asked, I'm not sure what you're saying. Quite a number of questions are asked. We do a lot of review of the background documentation.

MR. BARGELT: I have a question here, it says, "How much will a Hot Spot Removal decrease the risk from inhalation and direct radiation exposure?"

Now, in removing the hot spots we decrease the average concentration of the contaminants within the pond sediments. With the field screening, we will remove the upper level of the concentrations reducing the average of the ponds, which is what you calculate the risk on, then remove those sediments to treat and dispose of those and the remaining sediments will be a less average concentration, which will be of less risk.

MS. NICKLAUS: Howard, would you like to add onto that and maybe address the national contingency levels that we would be meeting?

MR. BLOOD: The only thing that I would add on that is getting back again to the

overall intent of an Interim Action and how things are put together, we don't generally do a formalized risk assessment, therefore the reduction of risk is more qualitative than quantitative.

However, I guess where Donna may have been headed with that leading question was the fact that in the National Contingency Plan generally we use a 10 to minus 6 or one in a million excess cancer risk as the departure for developing cleanup standards for final action. Certainly we would like to have interim actions be consistent with final actions as we have mentioned previously.

MR. SMITH: Okay. Let's take the next question.

MR. STOOPS: I have a series of questions on one card. I'll take them one at a time. "Why Interim Action on such a low level concentration project?"

As Randy presented and discussed, the remediation site is based upon risk. Risk for the Interim Action is predicated on an EPA default value, which are standards published in EPA guidance documents. When you're performing

the qualitative risk assessment you add to that generalized knowledge of what the toxins may be. And that's where we come up to the decision driver that a cleanup has to occur by using a default value of concentrations that are available to expose people to.

The next question is, "Why not do the total cleanup in one activity and be done with it?"

Part of when we were putting this proposed plan together is the realization that the pond may be used. So first and foremost we were looking at cleaning up the hot spots to present safe working conditions and to leave the pond in a usable state, if that's required in the future.

And the last part of this was,

"Continuing to a two or three phase project only
compounds the cost." As Howard Blood mentioned,
this cleanup would be promulgated on the idea
that it will support the final cleanup and
that's what we will be working toward.

MR. BARGELT: I have the question again, "What are the radiation levels we are talking about maximum and at the pond edge?"

And I will make sure I get your name and address and we will get back to you and give you those numbers.

MS. NICKLAUS: I'll address one of a series of questions on this card, then turn the others over to the appropriate people. The question is, "Did DOE know the pond, pump and pipe would someday pose a health risk when they constructed them?"

I cannot answer for the actual construction of them; however, when this facility was built, the pond was lined at the time and the sump is an enclosed facility, and again the pipe is solid, and therefore, it was constructed to not present a risk.

MR. BARGELT: Could I add to that?

The sump also, there are no pathways of exposure out of the sump and so the only pathways of exposure is really from inhalation of dust from the pond sediments when it's blown around.

Right now we are maintaining water on top of that pond so dust does not blow around. So there are no pathways, exposure pathways that come out of that sump.

MR. SMITH: While they are reviewing

that next question, I would like to remind you that if something you hear or think of raises a new question, feel free to put it on a card and raise your hand and Eric or Lee Toutt will pick those up and bring those forward, so they can be coming up as they are addressing one question. So don't hesitate to turn in additional cards.

MR. BARGELT: One of the questions on this card is, "How many people work at PBF?"

The reactor facility, I'm sure is what it means.

I think there is about 12 out there full time during the day. If anybody can help me out on that one. I think there are about 12 people out there on a daily basis.

AUDIENCE MEMBER: About six.

MR. BARGELT: Thank you. Another one here it says, "Explain how the risks were calculated?" We brought our risk expert in, Nick Stanisich from MSE, and I'll defer that question to him.

MR. SMITH: Would you like to explain what MSE stands for?

MR. BARGELT: Mountain States

Engineering, who are consultants who do work on the risk on this project.

MR. STANISICH: The risks were calculated using standard equations from EPA guidance documents, and again they were used with default exposure perimeters, and you use default exposure perimeters in many instances. One instance is Interim Action, but again also since our pathway of concern is inhalation of chromium, we have very little information about the airborne concentrations of chromium.

Without information, therefore, we have to revert to the default exposure parameters. Agreeably they are conservative and they are nationwide type of exposure parameters. They may not represent the actual site conditions, but they are the most usable and in agreement with EPA guidelines for interim actions at Superfund sites.

Also taken into consideration was direct radiation from cesium -- and I can answer John's question, I think. The radiation levels at the berm are less than 5 millirems per hour, John. From contact I think they are about three to five millirems per hour, somewhere in there. Even though there is a little contamination out there, there isn't a lot of activity directly on

1 the pond. 2 Although, using default exposure 3 parameters one has to assume a certain amount of 4 activity on the pond whether it's there or not; 5 therefore, you get exposure to direct radiation. 6 But our primary concern is 7 inhalation of chromium through the airborne 8 exposure route. MR. SMITH: Any follow-up comment by 9 10 the agencies on that point? Okay. Let's take 11 the next question, then. MR. STOOPS: We have another 12 13 question, "If the water is left in the pond, why would this Interim Action need to be continued?" 14 Following the guidance and the 15 documents that are available to us, the 16 administrative control keeping the pond flooded 17 to reduce the likelihood of dusting cannot be 18 considered in the evaluation of the risk, and 19 that's because it is the Interim Action. 20 Howard, would you like to add on to 21 22 that? MR. SMITH: You might have to 23

restate the question. I'm not sure Howard heard the original question.

24

25

MR. STOOPS: Howard, the question

was, "If the water is left in the pond, why

would this Interim Action need to be continued?"

MR. BLOOD: I think that Tom's response was correct in that we can't assume that that water will always remain there, and that's, I guess, inconsistent with any type of future use scenario where we have to assume that all administrative controls will be off, including the fence around the pond, so we have an opportunity or possibility of future direct radiation exposure as well as from the dusting that Tom mentioned.

MS. NICKLAUS: The question is, "What is the risk of the pond becoming contaminated in the future?"

By removing the contaminants that remain in the sump and the piping that go into the pond, that will minimize any potential for the future contamination from residual contaminants in the system. In terms of future use of the pond, that has not been determined at this point. However, it would need to be addressed before any future use would be proposed and contamination would be minimized.

Randy, do you have anything that you would like to add to that?

MR. BARGELT: No, I think you did a real good job.

MR. BLOOD: It's also true that I believe hexavalent chromium is no longer used in cooling the water, so even if the pond was used in the future, at very least we shouldn't have a reoccurrence of the chromium contamination problem.

AUDIENCE MEMBER: John Horan. I would like to comment on this one item. Twice now in the documents that we have in our hand that we're discussing tonight is the statement, "Future use of the reactor is not anticipated."

I don't think we should speculate on there being future uses. I think DOE is trying to close the door on PBF being used, period.

MS. NICKLAUS: The reactor has been -- I believe it states in the Proposed Plan that the reactor is in standby. Since that time that the Proposed Plan was issued, the reactor has been placed in shutdown mode; however, the final determination on use of the facility area at the PBF and any necessary use of the pond for

future use at PBF area or during decontamination and decommission activities that may take place there has not been determined at this time.

MR. BARGELT: I have another question. It says, "Does the Power Burst Facility contamination pose any threat to groundwater? Please explain."

It is a lined pond, and we have had no evidence that the pond has leaked to date. We feel that the pond holds water very well, it does at this point in time, and we don't believe we have any appreciable leaks in the liner, so we don't see there is a threat to the groundwater.

The groundwater is also about 470 feet below the ground surface.

MR. STOOPS: I would like to add to that. Part of how the FFA is written is that after the Interim Action we will eventually be performing remedial investigation over the WAG wide area, and at that time we would be investigating to test the liner to see if a pathway exposure did exist even though present indications shows that the liner does hold water.

MR. BARGELT: Another question. It says, "After the radioactivity leaves the reburied contaminants, will they no longer pose a threat to groundwater or to workers' or health?"

The radioactivity is not the only driver in this Interim Action. We have chromium as a driver, and inhalation pathways is the main driver that we're dealing with here. So there is a threat from chromium, which does not degrade over time, whereas the the half-life will eventually degrade.

So in answer to the question, we will still have -- even if the radioactivity goes away and we don't do anything about the chromium, we still have a risk.

MS. NICKLAUS: If I could add a little bit to that answer. After the contaminants are disposed of, if one of the two options presented in the proposed plan is utilized under the Option A at the Test Reactor Area, the disposal of the sediments in the pond area after treatment, hopefully the treatment would be used to reduce the risk in the sediments to an acceptable level, and the

1	sediments with residual contamination would be
2	disposed of in the warm waste pond, which would
3	have a cap, an engineered structure put over the
4	top.
5	If Option B treatment disposal at
6	the RWMC were selected, the contamination would
7	be mixed with cement and would be grouted, and
8	that would reduce any chance of the contaminants
9	leaking.
10	MR. SMITH: Are there any other
11	written questions? Any more note cards that you
12	would like to hand in? Is there anyone else who
13	would like to come to one of the microphones and
14	ask some questions or follow up one of the
15	responses that they've heard this evening?
16	Yes, would you like to come to the
17	microphone, please.
18	AUDIENCE MEMBER: has the area
19	outside of the fence been surveyed to see if any
20	of the contaminants have left the area?
21	MR. BARGELT: Wind blown
22	contaminants, for example?
23	AUDIENCE MEMBER: Wind blown
24	contaminants.

MR. BARGELT: No, we don't have any

wind data as of yet.

AUDIENCE MEMBER: So if we don't know if it has left the site, it doesn't do any good to determine if we can clean it up? If it hasn't left the site, do we really need to clean it up?

MR. BARGELT: Based on the default parameters and the risk assessment, we do have -- based on the concentrations of the chromium in the pond, it is assumed that there has been some wind blown sediment moved around the site there.

AUDIENCE MEMBER: My next question is a little more broad. All right. If the DOE and NRC and EPA cannot determine the deminimus values for radioactivity to clean this up to, then why do this at all? In other words, I don't know if you know what I'm talking about?

MR. BARGELT: Yes.

AUDIENCE MEMBER: Why if you're going to set a level, either it's above or below this level, okay. If it's above it, clean it up. If it's below it, leave it alone.

MS. NICKLAUS: I'll address part of this, then maybe Howard or Tom might want to

address a portion of the question also.

Howard, in case you didn't hear it, it's relating to setting the de minimus levels for cleanup, and if no de minimus levels have been set, why clean it up at all?

In answer to that, I would say that this cleanup in this Interim Action is based on risk base levels that the chromium, and not just the rad cesium, the radiation of cesium-137 is not the risk driver, it's also the chromium through the inhalation pathways as the primary driver, and the cleanup is to reduce the risk.

MR. SMITH: Donna, I believe you asked Howard if he had a comment. Howard, did you have a comment to follow up on that point?

MR. BLOOD: Just to reiterate, I guess, or maybe take a different tack on what Donna said, there is demonstrated risk from the chromium and the rad, and at very least, I think we can agree that any cleanup is better than no cleanup. The establishing of a de minimus level as being an appropriate cleanup standard I think is clearly not within the scope of this Interim Action, but we are certainly attempting to minimize or reduce the existing risk that we can

demonstrate is there.

MR. SMITH: Thank you. Any other questions on note cards -- oh, we have another card.

MR. STOOPS: This question asked,

"The FFA Track 1's, Track 2's and Interim

Actions all precede the comprehensive WAG

Remedial Investigation Feasibility Study. Will

all of these have to be reevaluated in the Waste

Area Group Remedial Investigation Feasibility

Study?"

The Track 1's, Track 2's and Interim Actions all support, or we hope all support what goes into the Remedial Investigation and Feasibility Study and the decision that emanates from that one document. We would look for concurrence on each aspect of it. The Track 1's are a decision package, the Track 2's are a decision package, and the Interim Action should be an action which will support the final action, and that final action should be carried out after the RI/FS, so we would look for concurrence between all the different documents.

Does that answer what you're asking?

MR. SMITH: We would ask the

individual who turned in the card, if there is a follow-up, please feel free to turn in another card or come to the microphone.

In the meantime, does anyone else have a question they would like to put to the panel? Let me indicate if there are no other questions, in a few minutes what we would like to do is take a short five minute break, then we will come back and those of you who have signed in to make prepared comments tonight, we'll take those comments. And those of you who heard much of the discussion, some of the questions we've heard and comments already, and if you'd like to make those at the microphone it would be entered into the record. So another call for cards or if someone would like to come to the microphone.

With that, then, why don't we take a five minute short break, then we'll reconvene and take the comment portion of the meeting.

(A recess was taken.)

MR. SMITH: Before we actually get started, a question was asked earlier and a commitment was made to get back with the response. I would like Randy to go ahead and read the question that came up and give the

response.

MR. BARGELT: "What radiation levels are we talking about, maximum at the end of the pond?" And Nick Stanisich did answer the question. Would you still like us to respond to you in writing?

AUDIENCE MEMBER: Just approximate value.

MR. BARGELT: Okay, it was 5 millirem per hour on the pond and 3 millirem per hour at the fence.

MR. SMITH: During this portion of the meeting, we would like those who have prepared comments, and I'm looking at those that signed in tonight, it looks like we have one individual who has indicated that they have prepared comments to make. But before we hear from that individual, if there are others of you who would like to make comments, impromptu comments, or we heard some questions in the early section that could lead to comments, so we would invite you to reflect on your question. So if you do have a comment, feel free come to the microphones and state your comment for the record.

During this portion the court reporter will be taking a verbatim comment. All relevant comments in their entirety will be listed and responded to in the Responsiveness Summary.

We would ask you as you come to the microphones, if you would please state your name and address, that will ensure that we will be able to send you a copy of the Responsiveness Summary.

with that, we would like to ask who would like to go first? Is there anyone who has a prepared comment and would like to come to the microphones at this time?

Mel Richardson. I don't have prepared comments. I came here to listen and learn. And I just had the impression in talking to some of the engineers, listening to what is here, we might be looking at a case of overkill in trying to clean this up, but on behalf of the people in Idaho I would say thank you, because I think a lot of us would like to know that you are that concerned about a small pond out in the middle of the desert and what it could do to the people

in the surrounding area, so I guess I come away with a certain feeling of satisfaction and comfort. You hate to see your dollars spent unwisely, but I guess at the same time if this is overkill, on behalf of a lot of citizens in Idaho, I say thank you.

MR. SMITH: Thank you for your comment. Other comments, please. While we're waiting, I would like to remind you that we have a written comment form in the back of the room. If you think of something that turns up, if you read the proposed plan, anything you heard in the responses from the agencies tonight, we would encourage you to turn in written comments during the comment period.

It has been extended to May the 24th, so there is ample time to prepare written comments. On the back of tonight's agenda it listed the contact person, which is Jerry Lyle, and also his name and mailing address appear on the comment sheet. So we hope that's ample information to remind you to send your comments to.

In the interim, any second thoughts of anyone making comments on this Interim Action

at the Power Burst Facility?

AUDIENCE MEMBER: Thank you very much. John Horan. My address is not necessary. I'm on the distribution list.

It's unfortunate that the Department of Energy has decided that, quote, "The future use of the PBF reactor is not anticipated." To me this is another bureaucratic rejection of the boron/neutron capture therapy proposal which in one month of operation could prevent more cancer deaths than any health impacts from the INEL from now until eternity if no cleanup actions were taken.

I think that statement of mine is a real indictment of our government's value system. But let me get on to the main purpose tonight of evaluating the PBF Evaporation Pond Proposal. The criteria that I use in evaluating any of the proposals remains the same. Is this a cost effective use of taxpayers dollars to modify a theoretical health risk?

In reading the proposed plan, I cannot come up with an honest answer. No health or environmental risk has been quantified. You tell us an Interim Action is used to control a

current potential threat to human health or the environment. We are also told in the proposal that present levels of contamination may be detrimental.

I then read the evaluation that the three agencies have made, and I find on page 6 this statement, quote, "The risk posed to workers and the general public during implementation of any of the alternatives, and this includes alternative No. 1 of No Action, would be very small," unquote. Therefore, I must assume that the risk to the public must be orders of magnitude lower and most likely nonexistent by any measurement or by any realistic calculation.

No air sampling data is available on chromium. Radiation exposure levels were not presented in the proposal. We did hear about them tonight, and they are really not that significant. Even the Hot Spots to be removed are not defined, they are relative numbers.

Nor, once again, as has happened at other of these opening hearings, are the levels of acceptable residual contamination defined. Yet for this so-called Interim Cleanup, you have

recommended the spending of 300,000 to \$400,000 taxpayers dollars. When I place these facts into my business machine it comes up "no sale." But I forget that waste cleanup is not a technical decision, but rather a political approach to solving a potential problem.

Now, let's look at the single alternate Interim Proposal, Hot Spot Removal. I consider such a simplistic approach to be totally inadequate and unworthy of fair evaluation. What happened to the capping alternative which was so highly valued in considering the MTR Warm Waste Pond Cleanup? Has this been considered? It's not even mentioned. It meets the criteria of environmental law, implementability and certainly cost effectiveness. It would also negate any of the very small risks to workers or to the general public.

Action is even being considered for such a minor cleanup project. It sounds like a make-work project. Don't complete the job, save enough of the work so you have to redo it another day. If your minds are made up to do more than is needed

to control this minor problem, doesn't it make more sense to go all the way, remove all 9,800 cubic feet -- or is it cubic yards -- cubic feet of sediment?

In the unlikely event that leakage or penetration has occurred in the Hypalon liner, then clean that up also, it won't amount to any significant increase in the effort. I don't consider this extra effort to remove all the sediment is necessary, but the triumvirate seems to be predisposed in that direction at a later date. If that's the case, save the money and effort by doing all the work under one project at one time.

A final comment. If the only options being considered are: A, treatment by soil washing and disposal at the TRA Pond, or B, treatment and disposal at the RWMC, Radioactive Waste Management Complex, the choice should be option B since it's cheaper, it's a proven and simple technology and it's more easily implemented.

The soil washing approach is more complex and requires the use of a planned treatment plant which may contain hidden costs

and problems.

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My final observation is that the proposed plan has been inadequately designed and evaluated. It should be withdrawn to develop a more complete, comparative analysis of other feasible options.

Thank you, Mr. Chairman.

MR. SMITH: Thank you, Mr. Horan.

Any other comments for this evening's meeting on the Power Burst Interim Action?

AUDIENCE MEMBER: My name is

Beatrice Brailsford. My address is 310 East

Center, Pocatello 83201. I'm probably the only

person in this room who agrees with both Mr.

Richardson and Mr. Horan.

I would like to make one specific comment about this particular cleanup plan, then move into a comment about the process that I think is illustrated by my specific comment.

Throughout this particular cleanup plan, the agencies are talking about removing the contaminants, and never once in the cleanup plan as written or in the presentation here has anyone said how in the world are you going to

remove it. We have the word "remove," and I want to give you a little analogy. A car pulls into the mall car parking lot, has a credit card on the dashboard, the credit card is removed. That's exactly what you told us here in the mailing and in the meeting, that the credit card was removed.

Now, the credit card might be removed by the owner of the credit card and car, and she spends an afternoon frittering away in the mall. Or the credit card might be removed by punching out the window and it's stolen and a million dollars is run up in three weeks. The same scenario is covered by the word "removal."

so back way up for real dunderheads in the back of the room like me who the first. question is: How in the world are you going to remove it? Then we can move on to this fancy facility or the treatment or the disposal or the chemical extraction. Let's start with the simple word "remove."

It's sort of like if every parent in this room went to a school meeting once a year. We all got together in a room and we asked the school: What are you going to be doing this

year? And the principal of the school said,
"Teaching." Then we all went home and thought
the principal of the school had done his job, he
fulfilled his responsibility, because he told us
that that school was going to be teaching.

What you're asking me to do is what you would do if you went home from such a meeting and felt that you had fulfilled your responsibility, that you had gone to the meeting, you asked the principal what is the school going to do, the school said, "We're going to teach." And you drove home feeling real good. Hey, I've done my job. I've done my part. I fulfilled my responsibility. And I'm supposed to go home from these meetings feeling the same way.

I also start hyperventilating instead. I don't feel as if I have fulfilled my responsibility at the ends of these meetings, because I don't know anything that you're going to remove the contaminants. It is my responsibility. I've accepted it. I've accepted what's at INEL in part as my burden. A lot of folks I know, probably you know, have posters up that say nuclear waste is a heavy

burden for our children and our children's children and our children's children's children.

And I'm one of the children.

Already we have gone through one generation and this burden has been passed to me. And it will shortly be passed to people in generations younger than I. What I'm afraid is going to happen is the burden that I have received will be further burdened by what I see as an enormous amount of obfuscation and hubris that has permeated this process so far, and I think that it is crippling us.

Most of you know that I'm a staff
person for the Snake River Alliance. I am
tonight, by the way, speaking as an individual.
When I speak for the Alliance, I read it. We're
having a meeting to try and come up with a work
plan, we do that sort of thing too, and I intend
to propose that our cleanup objective for 1992
is that by the end of this year, nine more
months, we have one meeting within the borders
of this state that is open, public and honest,
so that we know what the word "remove" means.
So that if a dunderhead in the back of the room
starts questioning risk assessment, we get to

1 talk about, in fact, the political aspects for 2 risk assessment. Now, I don't know what happens once 3 we've had that meeting, because that meeting has 4 never happened before. I don't know what would 5 happen if we all spoke honestly and publicly 6 with one another. But it's the only place to 7 8 start. So I hope that we will, all of us 9 10 together, be able to work on that. Thank you. MR. SMITH: Thank you, Mrs. 11 12 Brailsford. Any other comments from members of 13 the audience? Yes, Beatrice. 14 AUDIENCE MEMBER: I do want to say 15 one more thing. My name is Beatrice Brailsford. 16 I heard a while back that the Environmental 17 Protection Agency spent over 80 percent of its 18 19 travel budget. 20 When I heard that I thought, well, 21 one regulator down, one to go. So EPA, Roger, 22 over and out. MR. SMITH: Are there others of you 23

who would like to make a comment at the

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microphones? Seeing no hands, I would just like

to remind you about the opportunity for written comments, the colored sheet of paper at the back of the room, there is a black tray there, if you would like to take the time and fill it out this evening and place it in the tray, then it will go to the project managers at the table. Those of you who would like to mail it in, that information is also available. With that, on behalf of the agencies, our appreciation to all of you for being here tonight and we appreciate your participation. Thank you. (The hearing concluded at 8:15 p.m.)

Nancy Schwartz, CSR

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PROPOSED PLAN FOR THE POWER BURST FACILITY CORROSIVE WASTE SUMP AND EVAPORATION POND

PUBLIC MEETING BURLEY, IDAHO April 9, 1992

PANEL MEMBERS

Donna Nicklaus, DOE-ID Thomas Stoops, IDHW-DEQ Howard Blood, Region 10 EPA Randy Bargelt, EG&G

STAFF SUPPORT

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MR. ALLGOOD: Good evening. In keeping with our very strict promptness policy, at 6:30 we'll go ahead and start our meeting. I want to thank everyone for coming out this evening.

I do see quite a few new faces. For those of you who don't know who I am, my name is Lane Allgood. I'm the guy that staffs the INEL Outreach office in Twin Falls.

I want to take a brief second and plug our office, because we need work. But we do have an office, and we're going on our third year in Twin Falls, and we're there to respond to questions you have concerning INEL programs or procedures or operations.

If you or anyone you know of have questions concerning INEL's operations or want more information or you need an answer or you want to flat make a comment, please feel free to contact us in Twin Falls.

I put a stack of my business cards in the back. Please feel free to take one when you leave. If you find that you want to comment on an issue or you have a question, whether it be environmental or anything else, if you can't

remember the number, do not look up INEL, because it's not under INEL. Look under the white pages under U.S. Government, under the Department of Energy and lo and behold there we are. Most people have a tough time finding it and I understand why. I worked here for about a year and a half before I was able to find it in the phone book. So look under U.S. Government, under Department of Energy.

Tonight is our second meeting in a row held in Burley, our Magic Valley meeting.

Tonight we're here to discuss cleanup projects at the Power Burst Facility. With all of our environmental restoration programs and meetings, we would ask you that during the course of the official part of our meeting tonight we would hope that you would keep your comments and your questions relative to tonight's project.

If however, you have a question concerning another INEL-related issue, if you can wait during the break or wait afterwards and approach us with that, we would be more than happy to answer those. If we cannot answer it tonight, we'll do some research for you. If you really do have a question and you can't wait

until the end of the evening, please feel to attack my coworker, Mike Coe. Mike, would you raise your hand. Please give Mike a tap and step outside the room and address your question to him. Mike, hopefully will be able to respond to your question. Again, if he doesn't have an answer we'll find one for you.

with that, I want to thank everyone for coming out. I'll turn the time over to our moderator, Reuel Smith. You all know Reuel, he is the coordinator of the community relations plan. We didn't think he was earning his money doing that so his job is now moderator of our public meetings. Reuel Smith.

MR. SMITH: Thanks. Boy, do I like meetings. I appreciate that introduction, Lane. we are appreciative of the fact that the Twin Falls office has been helpful in answering a number of questions for individuals living in the Magic Valley.

I see some new faces tonight, and we appreciate you coming to the meeting tonight.

And I see some familiar faces of those that have attended before in the past. And we appreciate your participation with us.

Tonight I would like to just ask if you have any concerns about -- because we are working with the Community Relations Plan, if you have concerns about printed material or printed material that you're receiving in the mail, if you talk to myself or Eric Simpson. I would like to introduce Eric. Eric please stand.

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Eric Simpson is the editor of this newsletter, and I notice several of you are on the mailing list to receive this. If there are articles that you would like to see, issues that we haven't covered that you would like to have us talk about, talk to one of us about that and we'll see what we can do.

Also, if you have some interest or concerns about access to information, we have an information repository and public library. We would be glad to talk to you about that also.

Now, the agencies that are involved in this cleanup project are holding two meetings. One was held last night in Idaho Falls, and this meeting is the second meeting here in Burley. And we recently received a number of comments from citizens regarding the

number of meetings that we're holding on these plans and the frequency of these meetings and so forth, and the meeting locations.

Tonight we would like you to know that today we have some individuals here in Burley to talk about how we can go about this process in a better fashion. And we're doing some preliminary talks to identify issues of concern from citizens. We're planning to do some interactive workshops, possibly in late May, to find out your ideas and suggestions on how to improve the way the Department of Energy in particular is communicating information to you, and how we can increase your involvement in these programs.

Now, as Lane mentioned, the topic tonight is an Interim Action, and I would like to touch on that momentarily. In the Federal Facility Agreement and Consent Order -- this is an agreement that was signed in December between the Department of Energy, the State of Idaho and the Environmental Protection Agency Region 10, Seattle -- this agreement essentially lines out the types of cleanup projects that we will have at the Idaho National Engineering Laboratory.

If you would like a copy of this, we have some available, but I think you'd find this a very interesting document.

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Tonight's subject of an Interim

Action is about an action that the agencies are recommending to reduce, control or eliminate a problem with contamination with one of our facilities at the INEL.

Now, the comment period. We usually have a 30-day comment period on these projects, and usually we try to send this material out to the public and give you early notice about the availability of the proposed plans, and this particular time we had a problem with our mailing list. I notice that the gentleman here in the audience received his, for which I'm But three-fourths of the names on our mailing list did receive the mailing that was sent out on March 19th, but one-fourth of the names didn't come out on our mailing list, so the copies of their plans arrived late. Because of that, we received a request from the citizens group to extend the comment period.

The agencies have agreed to extend the comment period, and formal notice will be

going out after this series of meetings, so the comment period now will end on May 24th, for your information.

Now, the purpose of our meeting tonight is to have -- I think some of you were early at our informational session, having some informal discussions with some project managers. We appreciate you coming early to take advantage of that opportunity. But we'll also go into a little more depth here in our presentation; then we'll encourage you to ask questions. If there is something that is not clear about this project, we'll give you an opportunity to get those points clarified.

Then we'll go into a period of time when we'll ask those that have prepared comments or who would like to make a statement for the record to do so. Now, that's kind of an overall look at this.

Now, I would like to introduce some of the folks that will be talking tonight.

These are people that you'll want to ask questions of. I will start out -- all these individuals at this table are project managers.

They represent different agencies. And starting

from the far left is Tom Stoops, who is the representative from the State of Idaho. Tom is in the office in Idaho Falls and has been assigned to work on this. He's the project manager for this facility at the INEL on behalf of the State of Idaho.

Next to Tom is Donna Nicklaus, who is the Department of Energy project manager for this project. And next to Donna is Randy Bargelt. Randy is from EG&G. You might hear people use the word "contractor." EG&G contracts with the Department of Energy to operate the facility and to manage the cleanup program. Randy will be doing the presentation tonight.

Now, you may have noticed a conversation going on over at the telephone. Tonight we have a representative from the Environmental Protection Agency in Seattle who is connected to us by way of the telephone, and I would like to introduce Howard Blood, who is the Environmental Protection Agency representative on this project. And we just want to check our telephone connection and make sure things are working. Howard, are you there?

1 MR. BLOOD: Yes, I am. You're not 2 coming over as clear and good as last night; 3 however, I can make everything out. So I would 4 say we're okay. 5 MR. SMITH: Lane has just adjusted the speakers, so I think we can hear. Can you 6 7 hear okay in the back? 8 Howard, you were saying it was hard 9 for you to hear what we're saying here? 10 MR. BLOOD: It's better now. 11 MR. SMITH: Lane just turned up the 12 volume; maybe that will help. I hope that's not 13 too uncomfortable for the audience. 14 Well, I would like to ask these 15 individuals if they would like to make a comment 16 so that you can get familiar with them and the 17 agency they work for. Tom, we'll start with 18 you. 19 MR. STOOPS: Good evening. I'm Tom 20 I'm with the State of Idaho. Stoops. I'm the 21 Waste Group manager in the Idaho Falls field 22 office. I'm the Waste Area manager for the 23 Power Burst Facility. 24 I would like to extend thanks for

all of you to take the time out from your busy

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schedule to be here. We know that your input is important to what we call the circle of process. We look forward to hearing from you either verbally this evening or through your written comments, which we do encourage that you submit. Of the three agencies represented, the State, the EPA and DOE, we worked diligently coming up with this proposed plan, and it did come up as a consensus between all three agencies.

This meeting tonight and the subsequent opportunities for you to give us the written comments is your chance to participate in the process. We want to encourage that you do that. The other point we would like to stress is that this is a proposed plan. We haven't made any kind of final selections on what our alternative or what the options will be, and we would like you to give us your comments on both the alternatives and the options listed in the proposed plan or others that you may have done.

MS. NICKLAUS: Thanks, Tom. I'm

Donna Nicklaus. I'm the DOE manager on this

project. I would like to welcome you all here

tonight. It's good to see that we have a pretty good turnout here.

And, again, I would like to reiterate that this is a proposed plan for this Interim Action at the Power Burst Facility and we welcome your comments, both tonight during the meeting or any written comments that you submit during the comment period. And I guess I'll turn it over to Howard.

MR. BLOOD: Thank you, Donna. I want to also welcome all the participants to the meeting. I would like to reiterate that we're interested in hearing your comments. I can respond immediately rather than having to wait for a written comment sent to me. So please do participate this evening.

MR. SMITH: Okay. Thank you. It seemed like, Howard, you were cutting out a little bit. Did you detect that? I'm not sure what the problem is there, but I think we got the gist of what you were saying, Howard.

Just to reiterate, the Environmental Protection Agency is connected tonight so they can answer questions that come their way tonight rather than waiting for written responses or

Written questions and so forth through the mail.

I hope that this is more interactive in this fashion.

with that, I would like to just solve one of the curious things that you may have discussed tonight. As you sat down on the chair there is a little piece of paper, some note cards. The purpose of the note card is to invite you to write down questions or concerns that you have as you hear the presentation this evening. In just a moment we would like to have Randy Bargelt give the presentation.

note cards serve a couple points. As you write down your questions or concerns, we'll ask after this presentation that you hand those cards in.

One of the benefits is that all the details of your questions or concerns won't be lost through interpretations if I had to restate it, for instance, for the panel.

So we'll ask Eric to collect those cards when the presentation is over, if you would like to hand those to the end of the row or just hold it up in the air and Eric will collect it. It has worked fairly well at other

meetings. Feel free to submit two or three cards and hold them up any time a question comes up, and we'll bring them up to the panel.

There will be a time tonight after the presentation to ask questions of clarification if anything was unclear, to get that clarified, and just to restate a time that we'd like to ask you if you have any statements, or if anything comes to mind during the meeting that you'd like to state into the record, we'll go into that.

We have an opportunity tonight to see a proposal that includes several alternatives. One of the alternatives includes several options. I just want to make you aware that we're interested in comments on the options as well as the alternatives.

Now, here is a very important question that may be on your minds. What happens to your comments once you make them tonight? After the agencies review the body of public comment, either given orally in the meeting or written comments that have been turned in through the mail or handed in this evening, the agencies prepare a document that is

called a Responsiveness Summary where they address the comments that were made and how they affected the decisions that they are going to be making. That Responsiveness Summary will be placed in an administrative record file.

Presently that file is located in the Twin Falls Public Library, and you're welcome to have access to that.

Also, if you signed in this evening, we will mail you a copy of that Responsiveness
Summary so that you'll be aware of the comments
that were raised around the state and the
agencies' response to those comments.

Additionally, as you notice, we have a court reporter here, who is doing a verbatim transcript of tonight's meeting. Copies of the meeting's transcript will also be placed in the administrative record, so you will have access to clarify anything that you want to review.

Now, with that let's turn the time over to Randy and have his presentation. If he's going through and there is a slide that isn't clear to you, feel free to say, "I didn't understand that, could you explain that one more time," and he'll go over that at that time.

Randy.

MR. BARGELT: Thank you, Reuel. My name is Randy Bargelt. I'm the Waste Area Group 5 manager for EG&G. I'm going to present the agencies' proposed plan for an Interim Action at the Power Burst Facility Evaporation Pond and Corrosive Waste Sump. Those two smaller facilities comprise operable Unit 5-13. And we have each of our individual waste area groups split up into operable units. Within Waste Area 5 there are 13 operable units.

Power Burst Facility is located on the INEL, and on Highway 26 between Blackfoot and the site you'll notice the Power Burst Facility is located approximately six miles north of the highway. The Power Burst Facility reactor was in operation from 1972 to 1985, and it was built to perform testing on the pressurized water reactor fuel rods.

This is a photograph of the facility. And the operable unit consists of this Corrosive Waste Sump here and the lined Evaporation Pond here. The actual facilities -- these are the cooling towers for the reactor which was housed in here.

The secondary coolant water, which is what this treatment facility treated, was emptied about four times a year from here for maintenance, and that water contained X amount of chromium that was added for a rust inhibitor and/or an algal inhibitor, to keep the algae from growing in the water.

The hexavalent chromium was treated in this building -- the water was treated in this building -- to reduce the chromium, hexavalent chromium, to the less toxic trivalent chromium with sulfur dioxide. That water was then sent to the Corrosive Waste Sump, which is here, where it was neutralized to a pH of 6.5 or 7.0, then again was sent to the pond for evaporation.

This is a diagram which simplified, and it shows basically the pond and how it worked. This is a diagram of the cooling tower and reactor building where the sulfur dioxide was run through the less toxic trivalent chromium. Then it went through the Corrosive Waste Sump, and if you notice, the waste sump is mostly below ground. Then it was sent out through the pipe to the Evaporation Pond, where

it was evaporated. This is a picture of the Corrosive Waste Sump, which is an 11 by 11 square foot by 14 foot in height concrete structure. Only about three feet is sticking above the ground. The solution which entered through the sump from this side was treated, like I said, was neutralized, then it was sent out to the evaporation pond here. This is the evaporation pond, and it is surrounded by a six-foot-tall cyclone fence.

I might also point out there are about 1300 gallons of water at the bottom of the sump, and it does have cesium and chromium in the water. We will remove that water and test it, then dispose of it in the proper fashion.

After the water is removed, we'll decontaminate the sump and the pipeline to the pond.

This is the photograph of the pond.

There is the cooling tower again and the reactor building. The Corrosive Waste Sump is just on the other side of this berm, and here is the discharge pipe. The pond itself is about 140 feet by 140 feet square on the inside dimension. There is approximately six inches of sediment that covers the bottom of this pond.

The sediment was put there intentionally to hold the liner down to keep it from blowing away and also to protect the liner from the ultraviolet sun rays. You'll also notice a few wind-blown plants that are blown into here. They are not growing into the sediment pond. The liner itself is a 30 mil Hypalon liner. Hypalon is similar to the material that rubber rafts are constructed of.

Our contaminants of concern are chromium and cesium. And from our sampling activities that we have done in the past, we noticed an association between the higher values of chromium, the higher values of cesium and their locations within the pond.

And we see here higher values

generally do correlate together in the same

samples, not all of the time, but on a general

basis there is a good correlation, and this is

important to us because in our proposed Hot Spot

Removal we will use cesium as the indicator

element that we will clean up by portable

radiation testers.

The exposure pathways are inhalation of chromium through dust or particulate matter

in the air to workers on the site, and direct exposures to ionized radiation from cesium-137.

And the exposure at the fence line, as I pointed out before, is about three to five millirems.

The purpose of an Interim Action under CERCLA or Superfund is to remove, eliminate or reduce exposure to immediate risk. And the immediate risks are to the workers at the site, also to perform an early action to expedite the overall site cleanup on the INEL.

within this proposed plan we are proposing two alternatives. One alternative is No Action, and the second alternative is Hot Spot Removal, which is the agencies' preferred alternative. Hot Spot here is a relative term. When you think of hot spot, you think of highly contaminated areas, but we're dealing with very low level waste and the hot spots here are just the high values of the cesium and chromium within the pond itself. So we're dealing with low level waste.

Under the alternative we're proposing two treatment options. One is treatment with disposal at the Test Reactor Area treatment plant and disposal at the Warm Waste

Pond and treatment with disposal at the Radioactive Waste Management Complex.

The description of the alternatives, alternative No. 1 is No Action. The contaminants will remain in place; there will be no reduction in risk or exposure to the workers on the site. We didn't consider this any further because it did not meet the threshold criteria.

Alternative No. 2, Hot Spot Removal, which, again, is the preferred alternative, we propose to remove the concentrated sediments at various locations within the pond, and we'll do that using field screening with a portable radiation detector where we'll survey the entire surface of the pond, identify areas of higher concentration of cesium with the chromium associated with them, then we will remove just enough of the sediments to lower the risk to get the higher concentrations of those elements removed.

What this will do by using this technique is minimize the waste that we have to remove and treat and dispose of. And we'll also reduce the risk of the entire pond for the workers on the site. When we finish the removal

action we will take samples of the entire pond area again to verify that we have met the goals of the Interim Action.

This is a diagram of a summary of our past sampling results, and this area here on the bottom is 140-foot square area that contains the sediments. As I mentioned before it averages about six inches in thickness. There is about 360 yards total cubic yards of total sediments in the pond. Each one of those dots indicates an area that was sampled. The burgundy colored areas are areas that we have identified that we feel we will have to remove those sediments right now or when we perform the removal action.

And these areas here we feel are below, and probably below we'll leave those sediments. But you'll notice there are areas that do not have any samples in them. We will, like I mentioned before, screen the entire pond with a portable radiation detector and identify other areas within the pond where we will remove the higher concentration sediments. We think we may remove up to 100 cubic yards of material.

Under the second alternative we have

two treatment and disposal options. One is to treat at the processing facility proposed to the Warm Waste Pond Interim Action. We will transport and remove sediment from the evaporation pond to the proposed treatment plan at the Test Reactor Area, treat the sediments and dispose of treated sediments into the Warm Waste Pond and cap it as per that Interim Action for the Test Reactor Area. Within that -- the reason we want to do this is because we have like -- the sediments in the Test Reactor Area Warm Waste Pond and the Power Burst Facility Evaporation Pond are basically the same. are pea size to sand size sediments, and they also contain some contaminants, cesium in the sediments at the Warm Waste Pond, and there is cesium and chromium both at the Warm Waste Pond, and cesium and chromium both at the Power Burst Facility Evaporation Pond. So the process is compatible for both sides.

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MR. SMITH: Randy, I wonder if I might interrupt. For those of you who may not be aware, last August we held public meetings similar to this about this other facility he's referring to called the Test Reactor Area.

There is a similar situation where they had cooling tower waters that were discharged into a pond. So I was just wondering for a background, if some of you weren't aware of that, that is a location where it went through a similar cleanup process and they are proposing a treatment facility.

I just wondered if that might be helpful. At some point in time, if something seems unclear or vague or you don't have the background on it, just raise your hand and say could you elaborate on that, that would be fine.

MR. BARGELT: The other thing we would do with our sediments, as I said, is clean sediments would be put into the Warm Waste Pond. The Warm Waste Pond Interim Action is going to clean up approximately 21,000 cubic yards of sediments. Within this Interim Action we're only going to have a maximum of 100 cubic yards. So we would be adding to the Warm Waste Pond about one-half of one percent of that per volume.

To finish this slide, we transported to the Test Reactor Area, treat the sediments there and dispose of the sediments in the pond

and they would be capped.

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Option B would be to transport sediments to the Radioactive Waste Management Complex, mix the sediments with cement and inject the cement slurry into certified low level waste containers that exist at RWMC.

for an example, what we would be doing is filling void spaces within a box. This is just one of the waste containers. Within this there is a cut-up underground storage tank that has been put in here for disposal. There the associated piping has been put in here. If you notice there is quite a bit of void space within those containers. What we propose to do is inject the cement slurry into these containers and fill the voids. And this is about how it looks, like this is how it would be. The box I showed you previously is not this box, but is an example.

And you'll notice how the void spaces within the box were filled up very nicely with the sediment grout mixture, then it hardens. It looks like there is an irregular shaped object from here comparable to the irregular shaped object in the previous slide.

It looks like it's holding up very good and filled up the void spaces efficiently.

Another advantage to do this would be that the box itself, the strength would be increased so when they were stacked at the Radioactive Management Complex they would be more stable.

So the final thing would be disposal of these boxes at the Radioactive Waste Management Complex.

That's about all I have for my presentation. And we would like to ask for comments on both alternatives and on the treatment and disposal options. And I would like to let you know what the schedule is for the rest of this project.

As Reuel mentioned, the public comment period has been extended to May 24th of this year. And during the summer we will address the public comments and prepare the Responsiveness Summary. In the fall we will issue a Record of Decision, and then we'll prepare a remedial design. In the Spring of 1993 we will propose to perform the Remedial Action.

Thank you very much for your time.

MR. SMITH: Before Randy sits down, were there any points that you saw on these slides that you would like to have him go back over or clarify before we go to general the question/answer session? Randy, thanks.

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For some of you who are being introduced to this kind of a subject and a topic for the first time, we would like to indicate to you that even though we've mentioned there is a certain time during this meeting when you would be asked to give prepared statements, if you don't feel prepared tonight to make oral comments, feel free to pick up a comment form at the back of the room. It's on the colored sheet of paper and you can take that home with you. There is a mailing address on here where you can actually send your comment in to the Department of Energy, which will in turn be communicated with the other agencies. Again, if you turn those in before the end of the comment period, that will be appreciated.

Now, did anyone have any comments or questions that they would like to hand in on those note cards? But also we would like to ask

1	you if have any questions, feel free to come to					
2	this microphone, and I think with the					
3	competition in the surrounding rooms, it will be					
4	well to use the microphone so that everyone can					
5	hear the question. And we'll direct your					
6	question to one of the agencies, or you may even					
7	specify you would like to have a question for					
8	one of these agencies.					
9	Any general questions?					
10	AUDIENCE MEMBER: Do I have to give					
11	my name?					
12	MR. SMITH: No, not during this					
13	part.					
14	AUDIENCE MEMBER: I wanted to know					
15	how deep the water is in the Evaporation Pond?					
16	MR. BARGELT: How deep the water					
17	was?					
18	AUDIENCE MEMBER: Yes.					
19	MR. BARGELT: At the present time,					
20	there is about a foot of water on top of the					
2 1	sediments to keep dust from blowing off the					
22	pond.					
23	AUDIENCE MEMBER: Will you have to					
24	wait until that evaporates before you can start?					
25	MR. BARGELT: Yes, we will.					

1	AUDIENCE MEMBER: How long will that
2	take?
3	MR. BARGELT: We think once the
4	alternative has been chosen, we will stop
5	putting water in the pond. We think about the
6	beginning of this fall the water will evaporate
7	and we will be able to perform the action in the
8	spring.
9	AUDIENCE MEMBER: Now, you're not
L O	still using the pond, you're just keeping the
l 1	water on it to keep the sediments from blowing
L 2	dust; is that right?
l 3	MR. BARGELT: Right now we are
L 4	keeping water on it, and not letting it dry out.
l 5	AUDIENCE MEMBER: But it's not water
16	that has been contaminated from the sump, is it?
L 7	MR. BARGELT: Not now.
L 8	AUDIENCE MEMBER: Not now?
19	MR. BARGELT: Not now, but they do
2 0	still occasionally, because the Power Burst
21	Facility Reactor, correct me if I'm wrong, still
2 2	does purge occasionally, empty occasionally for
2 3	maintenance purposes.
2 4	AUDIENCE MEMBER: Do you know how
2.5	often?

1	MR. BARGELT: About two times a year
2	now.
3	AUDIENCE MEMBER: Can I go ahead
4	or
5	MR. SMITH: I think you're fine.
6	AUDIENCE MEMBER: I was curious
7	about the liner. It was put in in 1977 or 1978;
8	is that correct?
9	MR. BARGELT: '78.
10	AUDIENCE MEMBER: So what is the
11	projected shelf life of one of those liners?
12	MR. BARGELT: The projected shelf
13	life varies between how the liners are used.
14	Normally the under good conditions, when they
15	are good, my experience has only been about 15
16	years or so, but it varies depending on how much
17	they are exposed to various conditions, what
18	kind of materials are on the liners and how much
19	is exposed. You can't really give it a definite
20	shelf life answer that I'm aware of.
21	MS. NICKLAUS: I could add to that
22	just a little bit. As Randy stated, there is
23	water in the pond, and although we cannot verify
24	the integrity of the liner at this time, there

is no indication that we have a leak due to the

observations of water standing in the pond.

AUDIENCE MEMBER: But I'm wondering, how can you know that, because in your manual down here on page 3 it says that there is no leak detection system under the liner and no samples have been collected from beneath the liner to determine if leakage and subsequent contamination of the soils beneath liner have occurred.

MS. NICKLAUS: That's correct. And for this Interim Action we're looking at removing the concentrated contaminated sediments in the pond and sump area. However, I believe it also states in the proposed plan that before this area would be considered clean and be closed out, we would sample underneath the liner to verify that leakage had not occurred.

MR. SMITH: Yes.

AUDIENCE MEMBER: To go along with this -- my name is Dr. Miles. I have a question on this. If you got a leak, say it goes down to 150 feet, down below, that means you have to dig all that out; right?

MR. SMITH: Donna, do you want to take that question?

MS. NICKLAUS: I'll give a response.

If someone else would like to add in, please feel free to do so.

We would have -- it would not just be based on the leak and how far down it went, it would be based on concentration present. If any contamination occurred beneath the liner, sampling would take place and that would determine what concentrations are present of any potential contaminants; then we would evaluate if there is a risk present due to the presence of those contaminants.

audience member: Well, it seems to me that if you have no leak detection system there, it wouldn't hurt to do some detection system and some core samples underneath there.

MR. BARGELT: If I can add something to that. When we do our verification sampling under the liner, the geology out there between the bottom of the liner and the top of the basalt, there is approximately about six feet of unconsolidated material that sits there, sandy gravel, clay, dirt, topsoil and then from that point down it is all lava flow. Okay. So if the amount of volume of water that has gone into

that pond is because it does hold solution now efficiently, if there is any leakage, it's not a big leak. So most of it is evaporated, and it would probably be, if there was any leakage at all would be confined to that alluvium, is what we call it, the unconsolidated material. And it probably wouldn't have gone into the basalt into the lava flow. There hasn't been that much volume of water over a period of time put into the pond.

AUDIENCE MEMBER: Another question on that. I know our winters haven't been that bad, but when the winters get bad we get some freezing. We well know the contractions and things that go on and pose expansion with this liner that would create some problems too...

MR. BARGELT: Until we do our sampling, it is a possibility.

MR. SMITH: I'm going to make one note here. Also, some of the questions you're asking also bear a resemblance to a comment. If you would also like to come back, we're going to have a comment session here in a minute or two, so feel free to also repeat those comments for the record, because as I indicated, there is a

Responsiveness Summary that will be put together
and those comments that were received during
that period will be addressed in that summary.

MR. STOOPS: If I could close this out. One of the things that we'll do after we remediate the sediments in the pond with the alternative selected, we'll do verification sampling.

The entire area will be readdressed during the WAG RI/FS. Part of the WAG RI/FS will be addressing the kind of questions that you brought up, and we'll use the sampling that we have in the pond now, the verification sampling that we'll take, the samples that are taken out that are below the pond in the alluvium, and if there is still indications that we need to go deeper during the WAG RI/FS, that's what we will do now.

MR. SMITH: Tom, will you explain what WAG stands for, RI/FS?

MR. STOOPS: The RI/FS is the Remedial Investigation Feasibility Study. Do you want these explained?

MR. SMITH: I'm just wondering how many folks know what a Remedial Investigation

Feasibility Study is. Just for purposes of this conversation period, it might be well to highlight a couple parts of that.

MR. STOOPS: The remedial investigation is bureaucratically driven, it's highly outlined, there will be a work plan that is put together between the DOE, the EPA and the State to concur on. The purpose behind that is to generate a high level of data that can support both the risk assessment, which will follow the remedial investigation, and the statistics that go along with that, so we do quite a bit more sampling. The samples that are taken are tested at more rigorous levels. There is a ton of paperwork that is generated, and that is to create a paper trail so that it can be a legalistic document.

What is in that document is very legal. It's very definable, it's very traceable and there is concurrence between the three agencies on what is going to be done.

MR. SMITH: Along that line, I would like to see if Howard is still alive on the other end of the phone. Howard, have you any comments that you would like to make?

MR. BLOOD: The only time it occurred to me to add something was when you were discussing the possibility of a liner leakage; is perhaps the size of the trickles that we're talking about. The radionuclides are relatively large common structures and it's very likely, as I think Randy mentioned, that there could be leakage out into the soil. The water can pass through the soil very easily, but the contaminants partition off into the soil particles and stay resident in most cases.

MR. SMITH: Thank you, Howard.

MR. SMITH: Thank you, Howard.

Could everyone hear that okay? I know it's still kind of cutting out on some words a little bit, Howard. If everyone understood, then we won't have anyone here restate that. Yes, Carol.

AUDIENCE MEMBER: I'm thinking about this liner still. And it's 14 years old. I'm wondering if you plan to reuse this pond after you do the cleanup?

MS. NICKLAUS: The reuse of this pond has not been determined yet; however, if the pond was reused, a new liner would be placed prior to

1 use.

Also one thing to point out during any use that would occur in the future, chromium is not used anymore; it is not used as an inhibitor, so the chromium would not be added to the pond.

AUDIENCE MEMBER: How about the cesium?

MS. NICKLAUS: That would depend on the discharge water. Cesium, it would depend on use of the pond. The use of the pond has not been determined. The reactor has been placed in the shutdown mode, so the reactor would not be used; however, the pond may be used for other uses of the facility, or as I said, it's been undetermined at this point.

AUDIENCE MEMBER: Now, do you still use the same type of liners? So if you replace the liner will it still be another of the very same type, or have they improved?

MR. BARGELT: I can't answer specifically for operations for you exactly what kind of liner that they would use. But there are different kinds of liners that are in use today in landfills and various other kinds of

operations that are higher quality than Hypalon liners, specifically high density polyethylene. There are other options. There is also a new standard out that when you rebuild a liner or build a new pond you have to build a double liner and install the leak detection system.

MR. SMITH: Can those in back hear when the questions are being asked up here? Any note cards that anyone would like to hand in? Sometimes we don't like to talk into microphones, so you're welcome to write down a question on a card and just hold that up and Eric will pick that up, or you're welcome to come to the microphone and ask some questions. Carol.

AUDIENCE MEMBER: I feel like I'm hogging.

MR. SMITH: You're not. Sometimes by asking questions we all learn something, so questions are really encouraged.

AUDIENCE MEMBER: This is a different area. I was wondering about the grouting, and I wondered if -- well, what research has been done to show that grouting is effective in the long term? Has there been any

research done on that?

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MR. BARGELT: The research that has been done today at INEL that I'm aware of are some experiments that were done on sediments that were similar to what we have. They experimented on different mixtures of ratios of cement to sediment, different water mixtures and actually different additives to this cement to make it stronger. And as to exactly what studies have been done in the past, that I don't know. But we would in our remedial design phase, if that alternative is chosen, we would go through and actually run those tests.

AUDIENCE MEMBER: Do you have any idea how long the grout will hold up?

MR. BARGELT: Not specifically. I couldn't say 100 years, five years. I don't have the data in front of me to tell you that, but we would determine that absolutely as long as we can project it if that alternative is chosen. A fairly long period of time.

MS. NICKLAUS: I think in the treatability studies that have been done to date I cannot remember the exact number of days, but they did track the grout after it had been set

up and just looked at it for different lengths of time to see if it was cracking or if it was holding up and staying solid.

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MR. SMITH: Are there any questions that come to mind that you would like to ask the State of Idaho or the Environmental Protection Agency or the Department of Energy, any specific questions that might come to mind?

AUDIENCE MEMBER: I take it most of you are pretty well in agreement as to what is going on; is that right?

MR. SMITH: Would you like to address that, Tom?

MR. STOOPS: When the proposed plan comes out, it's based on a concurrence between the three agencies, and we agreed to present the two alternatives that you have in front of you and the two options. Other than that, we don't have any agreement on what the final outcome will be. That's why I didn't nod my head, we don't know what the final outcome will be. We agreed what the alternatives would be and what the options are.

MR. SMITH: Howard, would you like to add to that?

MR. BLOOD: Would you repeat the
initial question? I heard just a bit. I heard
some of the response to it.

MR. SMITH: The original question was: Are the three agencies in agreement on the plan? Is that essentially it?

AUDIENCE MEMBER: Right.

MR. BLOOD: I would say that you probably answered that about as well as you could. We went though a fairly extensive process to get to the point where it is now. There were a number of other alternatives, I would say our basic criteria was of being implementable for the type of action that we're doing here, but we're also trying to get some decision structure to the treatment and disposal alternative in the hopes of generating some public comment on the disposal process specifically for these contaminants.

MS. NICKLAUS: If I might add just a little bit to that. I think Tom pointed out that the three agencies were in concurrence about presenting the two alternatives and two options to you. The three agencies are also in concurrence on the preferred alternative, that

1 being the Hot Spot Removal.

MR. SMITH: I believe I saw another hand over here.

AUDIENCE MEMBER: Could someone elaborate on exactly what these chemicals are and how dangerous they are? What is chromium?

MR. SMITH: Good question.

MR. BARGELT: Both cesium and chromium are metals. Cesium is a radioactive metal and it creates ionizing radiation. And cesium and the metal -- chromium itself -- I'm not quite sure, Nick might help me out on this as far as -- is it a carcinogen?

Nick Stanisich is a subcontractor
that works for us on this project, and he works
for Mountain States Engineers out of the Ldaho
Falls office. He is our risk assessment expert.

MR. STANISICH: I think I can answer both questions. Chromium-3, trivalent, it is not a carcinogen, but it does have health effects, noncarcinogenic health effects and those consist mostly of nasal mucosa, atrophy and edema caused to the upper respiratory tract, and also causes problems with kidney dysfunction. The effects on the kidney are

basically due to ingestion of the chromium and not to inhalation of the chromium. But any time you have inhalation of chromium, you're going to get a little bit caught up in the upper respiratory pathways.

The hazard from cesium-137 is that it's ionizing; it produces ionizing radiation.

The hazard from cesium-137 is that it's ionizing; it produces ionizing radiation. And not directly, its daughter product, barium-137, produces gamma-emitting protons which causes the ionizing radiation, which causes most of the exposure, direct exposure.

Does that answer your question?

That was pretty highly technical.

AUDIENCE MEMBER: The first one I got, the second one --

MR. STANISICH: The second one is cesium is a radionuclide which emits ionized radiation.

AUDIENCE MEMBER: What is that?

MR. STANISICH: The gamma, beta,

alpha neutrons those are all forms of ionizing

radiation. What we mean by ionizing radiation

is the radiation has enough energy in it to

ionize molecules. That's opposed to, for

instance, nonionizing radiation, microwaves or

1 radio waves. Each one of those protons of 2 energy did not have enough energy to cause 3 ionization. So what we're talking about here is 4 protons of energy with greater amounts of energy than those things that we commonly referred to 5 6 as nonionizing radiation. AUDIENCE MEMBER: What is the half 7 life on this? 8 9 MR. STANISICH: It's about 30 years 10 for cesium-137. 11 AUDIENCE MEMBER: Thirty years? 12 MR. STANISICH: Yes. 13 AUDIENCE MEMBER: How about the 14 barium, are they connected? 15 MR. STANISICH: They are connected. 16 It's starter product. Cesium decays and the barium actually produces the gamma rays. And 17 they are basically in equilibrium. Any time you 18 19 have a parent radionuclide and a daughter 20 product, in a short period of time they become in equilibrium. In other words, they are about 21 the same concentration. So they will decay at 22 23 the same rate too. 24 MR. SMITH: Thank you, Nick.

25

Okay. Howard, did you have any

1 comment on the contaminants? 2 3 interest on this. 4 MR. SMITH: Carol. 5 I have to look at my acronyms -- Radioactive 6 7 Waste Management Complex -- now I can't remember -- the RCRA, what is it, Resource 8 9 10 11 waste? 12 13 answer that? 14 15 16 grout meet RCRA requirements? 17 18 19 20 21 22 23

24

25

MR. BLOOD: I appreciate the AUDIENCE MEMBER: Do you know if --Conservation Recovery Act, does it meet RCRA standards, the RWMC where you plan to take this MR. SMITH: Tom, would you like to MR. STOOPS: I understand what you're asking. You're asking about will the AUDIENCE MEMBER: Right. MR. STOOPS: One of the items that would be performed in a design study, if this was a selected alternative, would be to subject both the solids and the resulting grout to what they call the toxic leaching procedure, which is where we literally leach material out of some product, whether that be the sediments or the

resulting grout. Then the results of that would

be compared to what is published within RCRA guidelines or if it would fall under the guidance of RCRA. Our belief at the moment is that it won't.

AUDIENCE MEMBER: I guess what my question is, does that site meet those standards for storing RCRA materials?

MR. STOOPS: The RWMC?

AUDIENCE MEMBER: Yes.

MR. STOOPS: We wouldn't be storing RCRA material. If during the designing phase it was determined what leached from either the grout or the sediments wouldn't meet the RCRA requirements, then we would have to go to a new type of solution.

AUDIENCE MEMBER: Could you put it in RCRA site?

MS. NICKLAUS: Essentially if we grout this, the thing that would be evaluated if grouting was selected, would be by grouting it can we make it so it passes the leaching procedure that Tom was talking about and the leaching procedure would be geared towards does the chromium leach out of the grout mix. That would be the goal behind putting behind this

grout mix is that the chromium would leach out; therefore, the remaining waste would then be characterized because of the presence of the cesium in there, which is a radionuclide, so it would be low level waste, and then that would be disposed of at the RWMC, which is low level waste facility, it's not a RCRA facility.

AUDIENCE MEMBER: But if it does leach out, if you get it in the grout or if it happens, then you won't use that alternative; is that what I'm hearing?

MS. NICKLAUS: That would be something that we would evaluate. If this was a selected alternative and we selected grouting, that would be something that we would be evaluating. That would certainly be our goal, would be that the grout mix would stabilize that in concrete form and it would not leach.

AUDIENCE MEMBER: But if it did. I still want to know if it does meet RCRA requirements, where will you take it?

MR. STOOPS: If the chromium leached such that it would be a RCRA characteristic, we need to go back and reevaluate and come up with an alternative, what is appropriate to that

situation. Like I said, due to some previous testing, we don't believe that the material, the chromium, will leach to the point that it become a RCRA characteristic waste.

You have to be able to leach so much chromium from it for it to be governed under RCRA.

MR. BLOOD: To expand on that.

Before we dispose of all the waste, we wouldn't proceed if it was determined that this was not a correct remedy during the remedial design phase where we actually do the treatability study.

MR. SMITH: Did you understand what Howard just said?

MS. NICKLAUS: I think what we're all trying to say is that we realize that would be a concern if that option is selected. And that would be evaluated, and if we came up during a treatability study with an answer that is not appropriate, we can't dispose of that under the proper means that we're proposing under that alternative, we would have to step back and reevaluate where we'll go. So it is a valid concern that you're raising.

MR. STANISICH: The waste as it sits

1 now is not a hazardous waste.

AUDIENCE MEMBER: The chromium is not a hazardous waste?

MR. STANISICH: The chromium as it sits is not a hazardous waste.

MR. SMITH: We have to use the microphone just to make sure everyone can hear, and maybe explain that.

MR. STANISICH: When the samples were collected to determine what the concentrations of the contaminants in the pond were, a number of samples including those with the highest concentrations of chromium were subjected to the leaching procedure test. And the criteria for the leaching procedure is if 5 parts per million or 5 milligrams per liter of the chromium can leach out after the test.

Well, less than to my recollection,

I might be a little bit off, but less than one

part per million was leached from the chromium

at the highest concentrations. As the waste

sits in the pond right now, it is not a

hazardous waste, and that's why we're able to

pursue along the lines that it's the assumption

-- it's more than an assumption actually, we

have a process knowledge and analytical data that tell us if it's radioactive waste.

AUDIENCE MEMBER: So it's radioactive waste and not hazardous waste?

MR. STANISICH: Right. That's correct, it's low level waste and not hazardous. That's why we feel comfortable with the solution.

In regards to your question, and yours too about the groundwater -- or the migration of the contaminants through the ground and into the groundwater, this leaching procedure also tells us that even if water did leach through this and there was a leak in the bottom, the contaminants don't leach out, in other words they stay fixed to the soils.

That's another reason why I feel comfortable with this option.

Another reason is we performed a mass balance. In other words, we know how much chromium was used during the active operations, and during our sampling we then took a value of how much chromium was found in the pond. So I feel pretty comfortable that all the chromium was in the sediments in the pond.

MR. SMITH: Thank you. Any note cards that have been generated in the interim? Feel free to hand those in. Any other questions about this project? Okay.

Let me ask: In preparation to tonight's meeting with the information that some of you may have received earlier, is there anyone that has prepared comments or impromptu comments or things that you thought of that you would like to make for the record?

I propose, then, at this time that we take those comments, and if other questions come up after we end this comment session, I think we'll be here, and feel free to come up to talk to anyone from the agencies, individuals or project managers. So with that, Carol, would you like to? Do you need another minute or two?

AUDIENCE MEMBER: No. Can I just remind, if you made a comment, you need to make it again or it won't be on the record, the official record.

MR. SMITH: Thank you for stating that. During this portion of the meeting, then, the agencies will take these comments and put them in the Responsiveness Summary, so

that's one of the important parts of this meeting.

AUDIENCE MEMBER: My name is Carol Hondo and I'm from Burley. On behalf of Focus, a Mini-Cassia citizens' organization, I would like to make the following comments.

As citizens of the State of Idaho we have studied groundwater principles and how our aquifer works. We are well aware that this aquifer, one of worlds largest and sole source for 200,000 Idahoans, is extremely important and needs to be protected at all costs. We call upon the Department of Energy, INEL, EPA and the State of Idaho to protect the Snake River Aquifer from further contamination by not storing radioactive and/or hazardous wastes above it.

We find the proposed Power Burst

Facility project to be inadequate. We have a

third alternative. We feel that in order to

protect the Snake River Aquifer, all the

sediments in the Evaporation Pond must be

removed. Hot Spot Removal is not enough. All

the sediments are probably dangerous and need to

be removed so they are not above our aquifer.

We are concerned that the process of removing the Hot Spot is in violation of the integrity of the water liner in the Evaporation Pond, which has been there since 1977 or '78. We believe it will be cheaper in the long run to do it right the first time.

We are also concerned that you will only do the Hot Spots and walk away from the rest of it. We see neither proposed actions being a permanent solution as stated on page 7 of the action booklet.

particular concern. Cesium -- now I guess I got this mixed up, but I thought it was a RCRA hazardous waste, maybe that's my problem. But cesium has to be listed as RCRA hazardous waste and must be dealt with in full compliance with RCRA law. There should be a revision in the plan.

Sediments should go a to a RCRA permitted hazardous waste site so to be not on the aquifer. We find the grouting option to be unacceptable. Grouting is weak and subject to water damage and will degrade over time and become another problem. It is really not a

long-term solution for this waste. How about using a grout form and putting it in a concrete bunker where you can get to it later, a modern, treatable, storage facility.

Focus would like to go on record as protecting the State of Idaho from EPA's oversight. We see a lack of concern for the aquifer. We have seen through split sample data, no quality control. All the public is getting is the Department of Energy information and data.

There is no indication as to whether RCRA standards are being met. According to our understanding of the Federal Facility Agreement and Consent Order to the Department of Energy and INEL you are obligated to fulfill all requirements whether the site is permitted or not. In other words, you are not exempted from these standards.

Two last things. We have discovered that while there has been an increase in the Department of Energy and the Department of Defense Waste Management budget, yet there hasn't been. Yet EPA's Oversight budget has declined. This means that we have to reach the

enforcment agencies for the public with resource cuts so they can't be a credible enforcement authority.

We are concerned that lack of oversight funding will force EPA to rubber stamp projects that may need closer investigation. A few months ago President Bush directed federal employment authorities not to initiate any further enforcement activities in order to stimulate the industry. With 4,000-plus radioactive and hazardous waste sites in this country, we find this attitude reckless and foolish. We encourage our government, EPA, INEL and the Department of Energy and the State of Idaho to do what it should have done all along, is put the health of the Snake River Aquifer and put the people of the state first.

MR. SMITH: Thank you. Any other comments that someone would like to make for the record this evening? I would just like to remind you, then, as you refer to the proposed plan and reflect on what has been said here tonight by the agencies, feel free to take a page or several of these sheets with you. If you're so inclined to mail those in to us, they

1	will be made into the official comment record
2	for this project and we'll review them.
3	That concludes the meeting this
4	evening. Prior to adjourning, I would like to
5	ask the agencies if they have any closing
6	remarks they would like to make?
7	MS. NICKLAUS: I would just like to
8	thank everyone for coming.
9	MR. SMITH: Howard?
10	MR. BLOOD: I thank you for all
11	coming. I hope I responded and contributed to
12	the conversation.
13	MR. SMITH: Thank you, Howard. And
14	so we'll sign off now, and thanks for being here
15	with us.
16	We will remain afterwards to discuss
17	elements of this project. So with that, thanks
18	very much for being here.
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20	(The hearing concluded at 8:40 p.m.)
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REPORTER'S CERTIFICATE

STATE	OF	IDAHO)		
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I, NANCY SCHWARTZ, a Notary Public in and for the State of Idaho, do hereby certify:

That said hearing was taken down by me in shorthand at the time and place therein named and thereafter reduced to computer type, and that the foregoing transcript contains a true and correct record of the said hearing, all done to the best of my skill and ability.

I further certify that I have no interest in the event of the action.

WITNESS my hand and seal this 16th day of May, 1992.

Nancy Schwartz, Notary Public in and for the State of Idaho

My commission expires: August 23, 1992